DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016669 Address: 333 Burma Road **Date Inspected:** 28-Aug-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Mr. Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance(QA) Inspector, Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Heavy Dock Jetty

- 1. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 040690 perform SMAW welding on; Cross Bracing Gusset and Skin E of West shaft, Lift 3, in 109 mtr. elevation and the weld joint is identified as WD1-GUSA3-3-109 mtr.-W-4A. ZPMC CWI Identified as Mr. Zhao Chen Sun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2212-TC-U5B-FCM. (Preheating Photo attached)
- 2. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 058026 perform SMAW welding on; Cross Bracing Gusset and Skin E of East shaft, Lift 3, in 109 mtr. elevation and the weld joint is identified as WD1-GUSA3-3-109 mtr.-E-4A. ZPMC CWI Identified as Mr. Zhao Chen Sun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2212-TC-U5B-FCM.
- 3. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 050038 perform SMAW welding on; Cross Bracing Gusset to Skin A of North shaft, Lift 3, in 99 mtr. elevation and the weld joint is identified as WD1-GUSA3-3-99 mtr.-N-3A. ZPMC CWI Identified as Mr. Zhao Chen Sun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with

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WPS-B-P-2212-TC-U5B-FCM.

4. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 052910 perform SMAW welding on; Cross Bracing Gusset and Skin E of South shaft, Lift 3, in 89 mtr. elevation and the weld joint is identified as WD1-GUSA3-3-89 mtr.-S-4B. ZPMC CWI Identified as Mr. Zhao Chen Sun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-TC-U5B-FCM.

Bay no.11

- 5. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 057220 perform SMAW welding on; South shaft, Lift 5, Skin C to Grillage plate and the weld joint is identified as SSD1-TL5-1 B/F-16. ZPMC CWI Identified as Mr. Liu Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-3313-TC-u4c.
- 6. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 040582 perform SMAW welding on; South shaft, Lift 5, Skin D to Grillage plate and the weld joint is identified as SSD1-TL5-1 B/F-19. ZPMC CWI Identified as Mr. Liu Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-3313-TC-u4c. (Photo attached)
- 7. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 066163 perform SMAW welding on; North shaft, Lift 5, Skin A to Grillage plate and the weld joint is identified as NSD1-TL5-3 B/F-17A. ZPMC CWI Identified as Mr. Liu Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-3313-TC-u5B.
- 8. This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 070006 perform SMAW welding on; North shaft, Lift 5, Skin A to Grillage plate –Outside and the weld joint is identified as NSD1-TL5-3 B/F-23A. ZPMC CWI Identified as Mr. Liu Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-3313-TC-u5B.

Magnetic Particle Testing:

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6028 MT report for this date. The member is identified as South shaft, Lift 3 –Cross bracing Gusset to Skin A welding at Tower trial assembly, Heavy Dock Jetty (Notification no. 06505). The weld designation reviewed is as follows:

WD1-GUSA3-3-109-S -Jt. no. 3 A/B -South shaft, Lift 3

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

No relevent Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng (15921845703), who represents the Office of Structural Materials for your project.

Inspected By:	Baskar, Govindarajan	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer